

Mitosis and Cell Processes (Project ID 16276/ 22898)
Activity 3, Step 6

Sample Rubric 1

Score or Points	Level	Description	Example Student Responses
1	No Answer or Off-Task	Student writes some text, but doesn't answer the question.	-I don't know.
2	Irrelevant ideas or links Scientifically irrelevant ideas (misconceptions) OR Scientifically invalid connections between ideas	Student's answer includes incorrect information.	-We think that the medicine should mainly go to the cell membrane. It will <u>inclose</u> cells if any reproduce.
3	Partial link Unelaborated connections using relevant features OR Scientifically valid connections that are not sufficient to solve the problem.	Student gives an answer that needs elaboration, or that would not be enough to slow the cancer growth.	-We think that the medicine should <u>effect</u> the <u>centriole</u> because the <u>centriole</u> is the part that makes the chromosomes from dividing. -Maybe this could do something harmless to the DNA, making it unable to give instructions for making new cells temporarily.
4	Single link One scientifically complete and valid connection	Student gives one scientifically complete solution.	-We think that a good cancer medicine should be able to stop the spindle fibers from coming out of the <u>centrioles</u> so that the cells are unable to divide.
5	Multiple links Two or more scientifically complete and valid connections	Student gives an answer that is scientifically complete and that makes several connections between ideas.	- The cancer medicine that stopped cells from dividing out of control would need to stop the cell from giving complete information to both, or only one cell. The <u>centrioles</u> could be "messed" with so that the spindle fibers would bring chromosomes to only one of the cells, leaving the other incomplete. Another way the medicine could stop abnormal cell division would be to prevent the nucleus from dividing, or chromosomes from being copied, therefore the cells would only get half of the information, stopping too much cell division.